UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,969	06/25/2003	Guohua Chen	ARC 3135 R1	6463
	7590 10/18/2007 WASHBURN LLP	EXAMINER		
CIRA CENTRI	E, 12TH FLOOR		SILVERMAN, ERIC E	
2929 ARCH STREET PHILADELPHIA, PA 19104-2891			ART UNIT	PAPER NUMBER
	•		1615	
			MAIL DATE	DELIVERY MODE
			10/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
Office Action Summary		10/606,969	CHEN ET AL.		
		Examiner	Art Unit		
		Eric E. Silverman, PhD	1615		
The MAILI Period for Reply	NG DATE of this communication app				
A SHORTENED WHICHEVER IS  - Extensions of time ma after SIX (6) MONTH!  - If NO period for reply  - Failure to reply within Any reply received by	STATUTORY PERIOD FOR REPLY LONGER, FROM THE MAILING DAY be available under the provisions of 37 CFR 1.13 from the mailing date of this communication. is specified above, the maximum statutory period we the set or extended period for reply will, by statute, the Office later than three months after the mailing ijustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICAT 16(a). In no event, however, may a reply b rill apply and will expire SIX (6) MONTHS for cause the application to become AB ANDO	ION. e timely filed from the mailing date of this communication. DNED (35 U.S.C. § 133).		
Status					
2a)⊠ This action 3)□ Since this a	e to communication(s) filed on <u>21 Se</u> is <b>FINAL</b> . 2b) This application is in condition for allowant coordance with the practice under <i>E</i>	action is non-final.	•		
Disposition of Clain	ns				
4a) Of the a 5) ☐ Claim(s) 6) ☑ Claim(s) 2. 7) ☐ Claim(s)	7-26,29-34,36,38,39,44-56,59,60 ard bove claim(s) is/are withdraw is/are allowed 7-26,29-34,36,38,39,44-56,59,60 ard is/are objected to are subject to restriction and/or	vn from consideration. ad 105-124 is/are rejected.	ne application.		
Application Papers					
9) The specification The drawing Applicant market Replacement	ation is objected to by the Examiner  g(s) filed on is/are: a) access  ay not request that any objection to the out  that drawing sheet(s) including the correction  declaration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. on is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).		
Priority under 35 U.	S.C. § 119				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)		_			
	on's Patent Drawing Review (PTO-948) ure Statement(s) (PTO/SB/08)	4)  Interview Summ Paper No(s)/Ma 5)  Notice of Inform 6)  Other:	il Date		

Art Unit: 1615

### **DETAILED ACTION**

Applicants' remarks and amendments, filed 9-21-2007, have been received.

Claims 2, 7 – 26, 29 – 34, 36, 38, 39, 44 – 56, 59, 6, and 105 – 124 are pending and are considered on the merits below.

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 7 – 26, 29 – 34, 36, 38, 39, 44 – 56, 59, 6, and 105 – 124 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Note that some of the grounds for this rejection which were discussed in the previous office action have been overcome. All of the issues still remaining that relate to this rejection are discussed below.

Claims 2, 29, and 105 recite "substantially all". It is not clear how much material may remain after "substantially all" is released. 1%? 2%? 30%? Some other amount? The artisan is not appraised of the meaning of this term, and thus is unable to determine the metes and bounds of the claim.

Claims 15, 17, 29 – 33, 36, 38-39, 49, 113 – 115 recite "lactic acid-based polymer". The meaning of this term is unclear. Applicants' remarks point to paragraph [0080] in an attempt to show that this term is defined. However, paragraph [0080] merely states examples of what a "lactic acid-based polymer" *can* be; the paragraph

Art Unit: 1615

never states what a "lactic acid-based polymer" actually is in such a way as to show the metes and bounds of this term. The so-called 'definition' in paragraph [0080] is not a definition at all, but merely an example, which does not serve to define this indefinite term.

The remaining claims are rejected for depending on at least one abovementioned claim, thereby incorporating the indefinite limitations thereof.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 7 – 23, 29 – 34, 36, 38, 39, 44, 45, 47 – 56, 59, 60, 105 – 121 remain rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/238185 for reasons of record and those discussed below.

Claims 24 – 26, 46, 55, and 56 remain rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/238185 in view of WO 0/74650 for reasons of record and those discussed below.

#### Response to Arguments

Applicants' arguments have been fully considered, but are not persuasive.

Applicants argue that the '185 reference does not teach a composition where "substantially all" of the drug is delivered in a duration of less than about seven days. The term "substantially all" is indefinite as discussed above, and may be interpreted in

Art Unit: 1615

several ways. In one interpretation, the 74% and 75% of drug released within three days (in Example 6 of the '185 reference) reads on "substantially all" of the drug. However, even if "substantially all" was understood to mean "more than 99%", the composition of the '185 reference would meet this limitation. The composition in '185 delivers 53% or 62% of the drug in one day, and 75% or 74% of the drug in three days, after which time it is removed. Extrapolating to seven days, if the composition of '185 were not removed, it clearly would deliver more than 99% of the drug. This would require the removal of only about an average of 4.5% of the (originally present) amount of drug per day over the final four days. Since the device delivers more than half of the drug within one day, and an average of an additional 6% - 11% of (originally present) drug per day on the subsequent two days, it is reasonable to conclude that the device is indeed "selected to deliver substantially all of the beneficial agent" in seven days or less, and that in the example it is prevented from doing this only because it is removed prematurely (that is, before all the beneficial agent has been delivered).

New claims 122 – 124 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/238185 in view of US 6,130,200 to Brodbeck.

The teachings of the WO reference have been discussed previously.

What is lacking is a teaching of releasing no greater than specified amounts on the first day.

The Brodbeck reference teaches that it is advantageous to reduce the initial burst of injectable gel dosage forms (col. 18). Brodbeck teaches that this can be

Art Unit: 1615

accomplished by varying the viscosity of the gel. Brodbeck recognizes that this may make the gel difficult to inject, but this problem can be solved by adding emulsifiers or by heating the gel prior to injection (col. 18).

It would be prime facie obvious to a person of ordinary skill in the art at the time of the invention to lower the initial burst (that is, the amount of drug released in day 1) in the dosage form of '185. The motivation comes from Brodbeck, who teaches that such initial burst is disadvantageous. Since Brodbeck teaches how to solve the problem, and also teaches how to overcome problems associated with the solution, the artisan would enjoy a reasonable expectation of success.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric E. Silverman, PhD whose telephone number is 571 272 5549. The examiner can normally be reached on Monday to Friday 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571 272 8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric E. Silverman, PhD Art Unit 1615 .

MICHAEL P. WOODWARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600